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Flush-type connector, Power, 5-position, Socket, M12, K - Power, Rear mounting, M16 x 1.5, Individual wires, cable length: 0.2 m, 2.50 mm², PEX litz wire

Your advantages

- $\ensuremath{\,^{\scriptsize \ensuremath{\mathbb{M}}}}$ For compact devices: transmit high power in a confined space
- Easy-to-install, optimized XL housing contour with wrench size 19
- Mechanical tightening limitation for long-term-stable gasket
- Pre-assembled with litz wires for immediate use
- ☑ Customer-specific assemblies and litz wire lengths available
- Sealed on the litz wire side for optimum leak-tightness
- For high transmission safety: shield connection to the housing with optional EMC nut

RoHS

Key Commercial Data

Packing unit	1 pc
GTIN	4 055626 056234
GTIN	4055626056234
Weight per Piece (excluding packing)	22.220 g
Custom tariff number	85444290
Country of origin	Germany
Note	Made to Order (non-returnable)

Technical data

Dimensions

Length of cable	0.2 m	
Ambient conditions		
Ambient temperature (operation)	-40 °C 85 °C (without mechanical actuation)	
	-40 °C 85 °C (without mechanical actuation)	
Degree of protection	IP67	

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Technical data

General

Note	The electrical and mechanical data specified assume that the connector pair is correctly locked and mounted. If the connector is unlocked and if there is a danger of contamination, the connector must be sealed using a protective cap > IP54. Influences arising from litz wires, cables or PCB assembly must also be taken into consideration.
Rated current at 40°C	16 A
Rated voltage	630 V
Rated surge voltage	6 kV
Number of positions	5
Coding	K - Power
Standards/regulations	M12 connector IEC 61076-2-111 In line with
Signal type/category	Power
Status display	No
Overvoltage category	Ш
Degree of pollution	3
Test voltage	6 kV
Connection method	Individual wires
Insertion/withdrawal cycles	> 100
Mounting type	Rear mounting M16 x 1.5 Tightening limitation
Assembly instructions	Tightening limitation
Thread type	M16 x 1.5
Halogen-free	according to IEC 60754-1
Flame resistance	in acc. with UL FT-2

Material

Flammability rating according to UL 94	V0
Contact material	CuZn
Contact surface material	Au
Contact carrier material	РА
Material, knurls	Zinc die-cast, nickel-plated
Sealing material	FKM
Additional material specifications	PU 2K (Grout material)

Cable

Cable type	PEX litz wire
Conductor cross section	2.5 mm ²
AWG signal line	14
Wire colors	Black 1, black 2, black 3, black 4, green/yellow
Material conductor insulation	PE-X
Conductor material	Tin-plated Cu litz wires
Standards/specifications	M12 connector IEC 61076-2-111 In line with
Test voltage Core/Core	6 kV
Other resistance	Hydrolysis-resistant



Technical data

Cable

Ambient temperature (operation)	-25 °C 90 °C (Operation)
	-40 °C 105 °C (cable, fixed installation)
	-25 °C 105 °C (cable, flexible installation)

Standards and Regulations

Standards/specifications	M12 connector IEC 61076-2-111 In line with
Flame resistance	in acc. with UL FT-2
Halogen-free	according to IEC 60754-1
Other resistance	Hydrolysis-resistant
Flammability rating according to UL 94	VO
Safety note	WARNING: The connectors may not be plugged in or disconnected under load. Ignoring the warning or improper use may damage persons and/or property.
	WARNING: Commission properly functioning products only. The products must be regularly inspected for damage. Decommission defective products immediately. Replace damaged products. Repairs are not possible.
	WARNING: Only electrically qualified personnel may install and operate the product. They must observe the following safety notes. The qualified personnel must be familiar with the basics of electrical engineering. They must be able to recognize and prevent danger. The relevant symbol on the packaging indicates that only personnel familiar with electrical engineering are allowed to install and operate the product.
	The products are suitable for applications in plant, controller, and electrical device engineering.
	When operating the connectors in outdoor applications, they must be separately protected against environmental influences.
	Assembled products may not be manipulated or improperly opened.
	Only use mating connectors that are specified in the technical data of the standards listed (e.g. the ones listed in the product accessories online at phoenixcontact.com/products).
	When using the product in direct connection with third-party manufacturers, the user is responsible.
	For operating voltages > 50 V AC, conductive connector housings must be grounded
	• Ensure that when laying the cable, the tensile load on the connectors does not exceed the upper limit specified in the standards.
	Observe the corresponding technical data. You will find information: o On the product o On the packing label o In the supplied documentation o Online at phoenixcontact.com/products under the product
	Only use tools recommended by Phoenix Contact
	Use a protective cap to protect connectors that are not in use. The suitable accessories are available online in the accessory section of the product at phoenixcontact.com/products
	Ensure that the protective or functional ground has been properly connected.
	VDE 0100/1.97 § 411.1.3.2 and DIN EN 60 204/11.98 § 14.1.3 are applicable when combining several circuits in a cable and/or connector



Technical data

Standards and Regulations

	• The connector warms up in normal operation. Depending on the ambient conditions, the surface of the connector can continue to warm up. In this case, the user is responsible for posting warnings (e.g. DIN EN ISO 13732-1:2008-12).
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Environmental Product Compliance

REACh SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

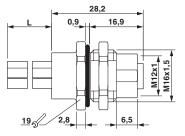
Drawings

Schematic diagram



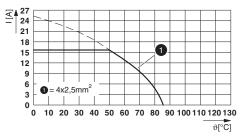
Pin assignment of M12 socket, 5-pos., K-coded, socket side view

Dimensional drawing



M12 flush-type socket

Diagram



I = current strength, T = ambient temperature

Classifications

eCl@ss

eCl@ss 10.0.1	27440102
eCl@ss 11.0	27440102
eCl@ss 4.0	27140800
eCl@ss 4.1	27140800
eCl@ss 5.0	27143400
eCl@ss 5.1	27143400



Classifications

eCl@ss

eCl@ss 6.0	27279200
eCl@ss 7.0	27440103
eCl@ss 8.0	27440103
eCl@ss 9.0	27440102

ETIM

ETIM 5.0	EC002061
ETIM 6.0	EC002061

UNSPSC

UNSPSC 13.2	39121413
UNSPSC 18.0	39121413
UNSPSC 19.0	39121413
UNSPSC 20.0	39121413
UNSPSC 21.0	39121413

Approvals

Approvals

Approvals

EAC

Ex Approvals

Approval details

EAC

B.01687

Accessories

Accessories

Screw plug - PROT M12 MS PWR - 1092802

EHC



An M12 screw plug for the unoccupied M12 females of the M12 POWER connectors, boxes, and flush-type connectors



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